

SOUTHERN PACIFIC COMPANY
RECORDS

SACRAMENTO DIVISION
ENGINEERING

ID#49

FIELD BOOK

461

TRAVERSE TABLE FOR TRANSIT BOOK.

From 1° to 90° for a distance of 100.

Degrees.	DEGREES.		¼ DEGREE.		½ DEGREE.		¾ DEGREE.		Degrees.
	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	
0			100.00	0.44	100.00	0.87	99.99	1.31	89
1	99.98	1.75	99.98	2.18	99.97	2.62	99.95	3.05	88
2	99.94	3.49	99.92	3.93	99.91	4.36	99.88	4.80	87
3	99.86	5.23	99.84	5.67	99.81	6.10	99.79	6.54	86
4	99.76	6.98	99.73	7.41	99.69	7.85	99.66	8.28	85
5	99.62	8.72	99.58	9.15	99.54	9.58	99.50	10.02	84
6	99.45	10.45	99.41	10.89	99.36	11.32	99.31	11.75	83
7	99.25	12.19	99.20	12.62	99.14	13.05	99.09	13.49	82
8	99.03	13.92	98.97	14.35	98.90	14.78	98.84	15.21	81
9	98.77	15.64	98.70	16.07	98.63	16.50	98.56	16.93	80
10	98.48	17.36	98.40	17.79	98.33	18.22	98.25	18.65	79
11	98.16	19.08	98.08	19.51	97.99	19.94	97.90	20.36	78
12	97.81	20.79	97.72	21.22	97.63	21.64	97.53	22.07	77
13	97.44	22.50	97.34	22.92	97.24	23.34	97.13	23.77	76
14	97.03	24.19	96.92	24.62	96.81	25.04	96.70	25.46	75
15	96.59	25.88	96.48	26.30	96.36	26.72	96.25	27.14	74
16	96.13	27.56	96.00	27.98	95.88	28.40	95.76	28.82	73
17	95.63	29.24	95.50	29.65	95.37	30.07	95.24	30.49	72
18	95.11	30.90	94.97	31.32	94.83	31.73	94.69	32.14	71
19	94.55	32.56	94.41	32.97	94.26	33.38	94.12	33.79	70
20	93.97	34.20	93.82	34.61	93.67	35.02	93.51	35.43	69
21	93.36	35.84	93.20	36.24	93.04	36.65	92.88	37.06	68
22	92.72	37.46	92.55	37.86	92.39	38.27	92.22	38.67	67
23	92.05	39.07	91.88	39.47	91.71	39.87	91.53	40.27	66
24	91.35	40.67	91.18	41.07	91.00	41.47	90.81	41.87	65
25	90.63	42.26	90.45	42.66	90.26	43.05	90.07	43.44	64
26	89.88	43.84	89.69	44.23	89.49	44.62	89.30	45.01	63
27	89.10	45.40	88.90	45.79	88.70	46.17	88.50	46.56	62
28	88.29	46.95	88.09	47.33	87.88	47.72	87.67	48.10	61
29	87.46	48.48	87.25	48.88	87.04	49.24	86.82	49.62	60
30	86.60	50.00	86.38	50.38	86.16	50.75	85.94	51.13	59
31	85.72	51.50	85.49	51.88	85.26	52.25	85.04	52.62	58
32	84.80	52.99	84.57	53.36	84.34	53.73	84.10	54.10	57
33	83.87	54.46	83.63	54.83	83.39	55.19	83.15	55.56	56
34	82.90	55.92	82.66	56.28	82.41	56.64	82.16	57.00	55
35	81.92	57.38	81.66	57.71	81.41	58.07	81.16	58.42	54
36	80.90	58.78	80.64	59.13	80.39	59.48	80.13	59.83	53
37	79.86	60.18	79.60	60.53	79.34	60.88	79.07	61.22	52
38	78.80	61.57	78.53	61.91	78.26	62.25	77.99	62.59	51
39	77.71	62.93	77.44	63.27	77.16	63.61	76.88	63.94	50
40	76.60	64.28	76.32	64.61	76.04	64.94	75.76	65.28	49
41	75.47	65.61	75.18	65.93	74.90	66.26	74.61	66.59	48
42	74.31	66.91	74.02	67.24	73.73	67.56	73.43	67.88	47
43	73.14	68.20	72.84	68.52	72.54	68.84	72.24	69.15	46
44	71.93	69.47	71.63	69.78	71.33	70.09	71.02	70.40	45
45	70.71	70.71							
Degrees.	DEGREES.		¼ DEGREE.		½ DEGREE.		¾ DEGREE.		Degrees.
	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	

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Backico - Master 1024
Joe Valerio - Content

Pioneer Woodpile to GFM

75' Deep 212' to 79

1613+38 to 1615+50

85 West W Sideing

3+24+80 East Face Cattle Pen

215220

2440

H. B. Bagwill

RFD 363 Del Rio Ave

Sacto

Cow between 926+925

Sacto

11+00

Joe Brune to Earnest Gillia

1200

70' 480

TABLE OF STADIA REDUCTIONS

ROD VERTICAL.

Min.	0°			1°			2°			3°			Min.	4°			5°			6°			7°
	Hor. Dist.	Diff. Elev.	Hor. Dist.	Diff. Elev.	Hor. Dist.	Diff. Elev.	Hor. Dist.	Diff. Elev.	Hor. Dist.	Diff. Elev.	Hor. Dist.	Diff. Elev.		Hor. Dist.	Diff. Elev.	Hor. Dist.	Diff. Elev.	Hor. Dist.	Diff. Elev.	Hor. Dist.	Diff. Elev.		
0	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
1	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
2	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
3	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
4	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
5	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
6	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
7	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
8	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
9	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
10	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
11	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
12	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
13	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
14	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
15	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
16	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
17	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
18	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
19	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
20	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
21	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
22	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
23	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
24	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
25	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
26	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
27	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
28	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
29	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
30	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
31	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
32	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
33	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
34	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
35	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
36	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
37	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
38	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
39	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
40	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
41	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
42	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
43	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
44	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
45	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
46	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
47	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
48	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
49	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
50	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
51	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
52	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69	15.50	97.28	
53	100.00	0.00	99.97	1.74	99.93	5.23	3.49	99.73	9.91	99.51	6.96	99.24	8.63	98.91	10.40	98.51	12.10	98.10	13.80	97.69</			

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TABLE OF STADIA REDUCTIONS.—Continued.

Min.	8°			9°			10°			11°			12°			13°			14°			15°		
	Hor. Dist.	Diff. Elev.	Hor. Dist.	Diff. Elev.	Hor. Dist.	Diff. Elev.	Hor. Dist.	Diff. Elev.	Hor. Dist.	Diff. Elev.	Hor. Dist.	Diff. Elev.	Hor. Dist.	Diff. Elev.	Hor. Dist.	Diff. Elev.	Hor. Dist.	Diff. Elev.	Hor. Dist.	Diff. Elev.	Hor. Dist.	Diff. Elev.		
0	88.66	13.73	97.53	15.45	56.98	17.10	96.39	18.73	96.39	20.34	94.94	21.92	94.15	23.47	93.39	25.00	92.61	26.50	91.12	28.00	89.63	29.50	88.14	
1	88.65	13.84	97.53	15.41	56.98	17.10	96.39	18.73	96.39	20.34	94.94	21.92	94.15	23.47	93.39	25.00	92.61	26.50	91.12	28.00	89.63	29.50	88.14	
2	88.65	13.89	97.52	15.56	56.94	17.21	96.38	18.78	96.38	20.34	94.91	21.91	94.12	23.46	93.38	25.00	92.60	26.50	91.11	28.00	89.62	29.50	88.13	
3	88.64	13.94	97.52	15.62	56.92	17.32	96.37	18.84	96.37	20.34	94.89	21.90	94.11	23.45	93.37	25.00	92.59	26.50	91.10	28.00	89.61	29.50	88.12	
4	88.64	14.01	97.45	15.73	56.87	17.37	96.35	18.95	96.37	20.32	94.86	21.88	94.08	23.43	93.35	25.00	92.57	26.50	91.08	28.00	89.59	29.50	88.10	
5	88.63	14.06	97.43	15.73	56.88	17.37	96.35	18.95	96.37	20.32	94.86	21.88	94.08	23.43	93.35	25.00	92.57	26.50	91.08	28.00	89.59	29.50	88.10	
6	88.63	14.12	97.44	15.78	56.86	17.43	96.33	19.05	96.33	20.30	94.81	21.86	94.03	23.41	93.33	25.00	92.55	26.50	91.06	28.00	89.57	29.50	88.08	
7	88.63	14.17	97.43	15.83	56.82	17.49	96.31	19.11	96.31	20.28	94.78	21.84	94.00	23.39	93.31	25.00	92.53	26.50	91.04	28.00	89.55	29.50	88.06	
8	88.63	14.23	97.41	15.89	56.80	17.56	96.28	19.16	96.28	20.26	94.74	21.82	93.96	23.37	93.29	25.00	92.51	26.50	91.02	28.00	89.53	29.50	88.04	
9	88.62	14.28	97.39	15.95	56.80	17.63	96.28	19.27	96.28	20.24	94.71	21.80	93.93	23.35	93.26	25.00	92.49	26.50	91.00	28.00	89.51	29.50	88.02	
10	88.62	14.34	97.37	16.00	56.78	17.65	96.24	19.27	96.24	20.22	94.67	21.78	93.89	23.33	93.22	25.00	92.47	26.50	90.98	28.00	89.49	29.50	88.00	
11	88.62	14.40	97.35	16.06	56.78	17.70	96.19	19.32	96.19	20.20	94.63	21.76	93.85	23.31	93.18	25.00	92.45	26.50	90.96	28.00	89.47	29.50	87.98	
12	88.62	14.45	97.31	16.11	56.74	17.76	96.19	19.32	96.19	20.20	94.63	21.76	93.85	23.31	93.18	25.00	92.45	26.50	90.96	28.00	89.47	29.50	87.98	
13	88.62	14.51	97.31	16.11	56.74	17.76	96.19	19.32	96.19	20.20	94.63	21.76	93.85	23.31	93.18	25.00	92.45	26.50	90.96	28.00	89.47	29.50	87.98	
14	88.62	14.56	97.29	16.22	56.68	17.82	96.13	19.34	96.13	20.18	94.58	21.74	93.80	23.29	93.13	25.00	92.43	26.50	90.94	28.00	89.45	29.50	87.96	
15	88.62	14.62	97.28	16.28	56.63	17.89	96.03	19.34	96.03	20.18	94.58	21.74	93.80	23.29	93.13	25.00	92.43	26.50	90.94	28.00	89.45	29.50	87.96	
16	88.62	14.67	97.26	16.33	56.63	17.93	96.03	19.34	96.03	20.18	94.58	21.74	93.80	23.29	93.13	25.00	92.43	26.50	90.94	28.00	89.45	29.50	87.96	
17	88.62	14.73	97.24	16.38	56.58	17.97	95.98	19.38	95.98	20.16	94.53	21.72	93.75	23.27	93.08	25.00	92.41	26.50	90.92	28.00	89.43	29.50	87.94	
18	88.62	14.78	97.23	16.43	56.53	18.00	95.93	19.41	95.93	20.14	94.48	21.70	93.70	23.25	93.03	25.00	92.39	26.50	90.90	28.00	89.41	29.50	87.92	
19	88.62	14.83	97.21	16.48	56.48	18.03	95.88	19.44	95.88	20.12	94.43	21.68	93.65	23.23	92.98	25.00	92.37	26.50	90.88	28.00	89.39	29.50	87.90	
20	88.62	14.89	97.19	16.53	56.43	18.06	95.83	19.47	95.83	20.10	94.38	21.66	93.60	23.21	92.93	25.00	92.35	26.50	90.86	28.00	89.37	29.50	87.88	
21	88.62	14.94	97.17	16.58	56.38	18.09	95.78	19.50	95.78	20.08	94.33	21.64	93.55	23.19	92.90	25.00	92.33	26.50	90.84	28.00	89.35	29.50	87.86	
22	88.62	15.00	97.15	16.63	56.33	18.12	95.73	19.53	95.73	20.06	94.28	21.62	93.50	23.17	92.87	25.00	92.31	26.50	90.82	28.00	89.33	29.50	87.84	
23	88.62	15.05	97.13	16.68	56.28	18.15	95.68	19.56	95.68	20.04	94.23	21.60	93.45	23.15	92.84	25.00	92.29	26.50	90.80	28.00	89.31	29.50	87.82	
24	88.62	15.10	97.11	16.73	56.23	18.18	95.63	19.59	95.63	20.02	94.18	21.58	93.40	23.13	92.81	25.00	92.27	26.50	90.78	28.00	89.29	29.50	87.80	
25	88.62	15.15	97.09	16.78	56.18	18.21	95.58	19.62	95.58	20.00	94.13	21.56	93.35	23.11	92.78	25.00	92.25	26.50	90.76	28.00	89.27	29.50	87.78	
26	88.62	15.20	97.07	16.83	56.13	18.24	95.53	19.65	95.53	19.98	94.08	21.54	93.30	23.09	92.75	25.00	92.23	26.50	90.74	28.00	89.25	29.50	87.76	
27	88.62	15.25	97.05	16.88	56.08	18.27	95.48	19.68	95.48	19.96	94.03	21.52	93.25	23.07	92.72	25.00	92.21	26.50	90.72	28.00	89.23	29.50	87.74	
28	88.62	15.30	97.03	16.93	56.03	18.30	95.43	19.71	95.43	19.94	93.98	21.50	93.20	23.05	92.69	25.00	92.19	26.50	90.70	28.00	89.21	29.50	87.72	
29	88.62	15.35	97.01	16.98	55.98	18.33	95.38	19.74	95.38	19.92	93.93	21.48	93.15	23.03	92.66	25.00	92.17	26.50	90.68	28.00	89.19	29.50	87.70	
30	88.62	15.40	96.99	17.03	55.93	18.36	95.33	19.77	95.33	19.90	93.88	21.46	93.10	23.01	92.63	25.00	92.15	26.50	90.66	28.00	89.17	29.50	87.68	
31	88.62	15.45	96.97	17.08	55.88	18.39	95.28	19.80	95.28	19.88	93.83	21.44	93.05	22.99	92.60	25.00	92.13	26.50	90.64	28.00	89.15	29.50	87.66	
32	88.62	15.50	96.95	17.13	55.83	18.42	95.23	19.83	95.23	19.86	93.78	21.42	93.00	22.97	92.57	25.00	92.11	26.50	90.62	28.00	89.13	29.50	87.64	
33	88.62	15.55	96.93	17.18	55.78	18.45	95.18	19.86	95.18	19.84	93.73	21.40	92.95	22.95	92.54	25.00	92.09	26.50	90.60	28.00	89.11	29.50	87.62	
34	88.62	15.60	96.91	17.23	55.73	18.48	95.13	19.89	95.13	19.82	93.68	21.38	92.90	22.93	92.51	25.00	92.07	26.50	90.58	28.00	89.09	29.50	87.60	
35	88.62	15.65	96.89	17.28	55.68	18.51	95.08	19.92	95.08	19.80	93.63	21.36	92.85	22.91	92.48	25.00	92.05	26.50	90.56	28.00	89.07	29.50	87.58	
36	88.62	15.70	96.87	17.33	55.63	18.54	95.03	19.95	95.03	19.78	93.58	21.34	92.80	22.89	92.45	25.00	92.03	26.50	90.54	28.00	89.05	29.50	87.56	
37	88.62	15.75	96.85	17.38	55.58	18.57	94.98	19.98	94.98	19.76	93.53	21.32	92.75	22.87	92.42	25.00	92.01	26.50	90.52	28.00	89.03	29.50	87.54	
38	88.62	15.80	96.83	17.43	55.53	18.60	94.93	20.01	94.93	19.74	93.48	21.30	92.70	22.85	92.39	25.00	91.99	26.50	90.50	28.00	89.01	29.50	87.52	
39	88.62	15.85	96.81	17.48	55.48	18.63	94.88	20.04	94.88	19.72	93.43	21.28	92.65	22.83	92.36	25.00	91.97	26.50	90.48	28.00	88.99	29.50	87.50	
40	88.62	15.90	96.79	17.53	55.43	18.66	94.83	20.07	94.83	19.70	93.38	21.26	92.60	22.81	92.33	25.00	91.95	26.50	90.46	28.00	88.97	29.50	87.48	
41	88.62	15.95	96.77	17.58	55.38	18.69	94.78	20.10	94.78	19.68	93.33	21.24	92.55	22.79	92.30	25.00	91.93	26.50	90.44	28.00	88.95	29.50	87.46	
42	88.62	16.00	96.75	17.63	55.33	18.72	94.73	20.13	94.73	19.66	93.28	21.22	92.50	22.77	92.27	25.00	91.91	26.50	90.42	28.00	88.93	29.50	87.44	
43	88.62	16.05	96.73	17.68	55.28	18.75	94.68	20.16	94.68	19.64	93.23	21.20	92.45	22.75	92.24	25.00	91.89	26.50	90.40	28.00	88.91	29.50	87.42	
44	88.62	16.10	96.71	17.73	55.23	18.78	94.63	20.19	94.63	19.62	93.18	21.18	92.40	22.73	92.21	25.00	91.87	26.50	90.38	28.00	88.89	29.50	87.40	
45	88.62	16.15	96.69	17.78	55.18	18.81	94.58	20.22	94.58	19.60	93.13	21.16	92.35	22.71	92.18	25.00	91.85	26.50	90.36	28.00	88.87	29.50	87.38	
46	88.62	16.20	96.67	17.83	55.13	18.84	94.53	20.25	94.53	19.58	93.08	21.14	92.30	22.69	92.15	25.00	91.83	26.50	90.34	28.00	88.85	29.50	87.36	
47	88.62	16.25	96.65	17.88	55.08	18.87	94.48	20.28	94.48	19.56	93.03	21.12	92.25	22.67	92.12	25.00	91.81	26.50	90.32	28.00	88.83	29.50	87.34	
48	88.62	16.30	96.63	17.93	55.03	18.90	94.43	20.31	94.43	19.54	92.98	21.10	92.20	22.65	92.09	25.00	91.79	26.50	90.30	28.00	88.81	29.50	87.32	
49	88.62	16.35	96.61	17.98	54.98	18.93	94.38	20.34	94.38	19.52	92.93	21.08	92.15	22.63	92.06	25.00	91.77	26.50	90.28	28.00	88.79	29.50	87.30	
50	88.62	16.40	96.59	18.03	54.93	18																		

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TABLE OF SPADIA REDUCTIONS.—Continued.

Min	16°		17°		18°		18°		Min.	20°		21°		22°		23°
	Hor. Dist.	Diff. Elev.	Hor. Dist.	Diff. Elev.	Hor. Dist.	Diff. Elev.	Hor. Dist.	Diff. Elev.		Hor. Dist.	Diff. Elev.	Hor. Dist.	Diff. Elev.	Hor. Dist.	Diff. Elev.	
0°	92.40	25.50	91.45	27.35	90.45	29.20	89.40	31.05	0	88.30	32.14	87.16	33.46	85.97	34.72	84.65
2	92.37	25.55	91.42	27.40	90.42	29.25	89.37	31.10	2	88.27	32.19	87.13	33.51	85.94	34.77	84.70
4	92.34	25.60	91.39	27.45	90.39	29.30	89.34	31.15	4	88.24	32.24	87.10	33.56	85.91	34.82	84.75
6	92.31	25.65	91.36	27.50	90.36	29.35	89.31	31.20	6	88.21	32.29	87.07	33.61	85.88	34.87	84.80
8	92.28	25.70	91.33	27.55	90.33	29.40	89.28	31.25	8	88.18	32.34	87.04	33.66	85.85	34.92	84.85
10	92.25	25.74	91.30	27.60	90.30	29.45	89.25	31.30	10	88.15	32.39	87.01	33.71	85.82	34.97	84.90
12	92.22	25.79	91.27	27.65	90.27	29.50	89.22	31.35	12	88.12	32.44	86.98	33.76	85.79	35.02	84.95
14	92.19	25.84	91.24	27.70	90.24	29.55	89.19	31.40	14	88.09	32.49	86.95	33.81	85.76	35.07	85.00
16	92.16	25.89	91.21	27.75	90.21	29.60	89.16	31.45	16	88.06	32.54	86.92	33.86	85.73	35.12	85.05
18	92.13	25.94	91.18	27.80	90.18	29.65	89.13	31.50	18	88.03	32.59	86.89	33.91	85.70	35.17	85.10
20	92.10	25.99	91.15	27.85	90.15	29.70	89.10	31.55	20	88.00	32.64	86.86	33.96	85.67	35.22	85.15
22	92.06	27.04	91.09	28.49	90.07	29.90	89.00	31.63	22	87.89	32.63	86.75	33.93	85.62	35.23	85.16
24	92.03	27.09	91.06	28.54	89.99	29.95	88.93	31.68	24	87.86	32.68	86.70	33.98	85.57	35.28	85.21
26	92.00	27.13	91.03	28.58	89.96	30.00	88.90	31.73	26	87.83	32.73	86.65	34.03	85.52	35.33	85.26
28	91.97	27.17	91.00	28.62	89.93	30.04	88.87	31.77	28	87.80	32.78	86.60	34.08	85.47	35.38	85.31
30	91.93	27.23	90.96	28.68	89.89	30.09	88.83	31.82	30	87.77	32.83	86.55	34.13	85.42	35.43	85.36
32	91.90	27.28	90.92	28.73	89.89	30.14	88.82	31.87	32	87.74	32.88	86.50	34.18	85.37	35.48	85.41
34	91.87	27.33	90.89	28.77	89.86	30.17	88.79	31.92	34	87.71	32.93	86.47	34.23	85.32	35.53	85.46
36	91.84	27.38	90.86	28.82	89.83	30.21	88.76	31.97	36	87.68	32.98	86.42	34.28	85.27	35.58	85.51
38	91.81	27.43	90.83	28.87	89.79	30.25	88.71	32.02	38	87.65	33.02	86.37	34.33	85.22	35.63	85.56
40	91.77	27.48	90.79	28.92	89.76	30.29	88.67	32.07	40	87.62	33.07	86.32	34.38	85.17	35.68	85.61
42	91.74	27.52	90.76	28.96	89.73	30.32	88.64	32.12	42	87.59	33.11	86.29	34.43	85.12	35.73	85.66
44	91.71	27.57	90.72	29.01	89.69	30.35	88.60	32.17	44	87.56	33.16	86.24	34.48	85.07	35.78	85.71
46	91.68	27.62	90.69	29.06	89.65	30.38	88.55	32.22	46	87.53	33.20	86.19	34.53	85.02	35.83	85.76
48	91.65	27.67	90.66	29.11	89.62	30.41	88.50	32.27	48	87.50	33.25	86.14	34.58	84.97	35.88	85.81
50	91.61	27.72	90.62	29.15	89.58	30.45	88.45	32.32	50	87.47	33.30	86.09	34.63	84.92	35.93	85.86
52	91.58	27.77	90.59	29.20	89.54	30.49	88.40	32.37	52	87.44	33.35	86.04	34.68	84.87	35.98	85.91
54	91.55	27.82	90.56	29.25	89.51	30.53	88.35	32.42	54	87.41	33.40	86.00	34.73	84.82	36.03	85.96
56	91.52	27.86	90.53	29.30	89.47	30.57	88.30	32.47	56	87.38	33.45	85.95	34.78	84.77	36.08	86.01
58	91.48	27.91	90.49	29.35	89.43	30.61	88.25	32.52	58	87.35	33.50	85.90	34.83	84.72	36.13	86.06
60	91.45	27.96	90.45	29.40	89.40	30.65	88.20	32.57	60	87.32	33.55	85.85	34.88	84.67	36.18	86.11
c=115	72	21	73	23	74	25	75	26	c=75	70	27	71	29	72	30	73
c=130	110	33	110	35	109	37	108	38	c=110	108	40	107	42	105	44	105
182	182	54	181	57	180	60	179	63	c=190	178	66	177	70	175	73	174

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TABLE OF STADIA REDUCTIONS.—Continued.

Min.	24°			25°			26°			27°			28°			29°			30°		
	Hor. Dist.	Elev.	Diff. Elev.	Hor. Dist.	Elev.	Diff. Elev.	Hor. Dist.	Elev.	Diff. Elev.	Hor. Dist.	Elev.	Diff. Elev.	Hor. Dist.	Elev.	Diff. Elev.	Hor. Dist.	Elev.	Diff. Elev.	Hor. Dist.	Elev.	Diff. Elev.
0'	83.46	37.16	82.14	83.30	37.20	82.09	83.14	37.24	82.05	82.98	37.28	81.92	82.82	37.32	81.76	82.72	37.36	81.60	82.60	37.40	81.44
2'	83.41	37.20	82.09	83.24	37.24	82.05	82.98	37.28	81.92	82.92	37.32	81.86	82.86	37.36	81.80	82.80	37.40	81.74	82.74	37.44	81.68
4'	83.37	37.24	82.05	83.20	37.28	82.01	82.94	37.32	81.88	82.88	37.36	81.82	82.82	37.40	81.76	82.76	37.44	81.70	82.70	37.48	81.64
6'	83.33	37.28	82.01	83.16	37.32	81.96	82.90	37.36	81.90	82.84	37.40	81.84	82.84	37.44	81.78	82.78	37.48	81.72	82.72	37.52	81.68
8'	83.29	37.32	81.96	83.12	37.36	81.90	82.84	37.40	81.84	82.78	37.44	81.78	82.78	37.48	81.72	82.72	37.52	81.66	82.66	37.56	81.62
10'	83.24	37.36	81.92	83.08	37.40	81.88	82.80	37.44	81.82	82.76	37.48	81.76	82.76	37.52	81.70	82.70	37.56	81.64	82.64	37.60	81.60
12'	83.20	37.40	81.88	83.04	37.44	81.84	82.76	37.48	81.80	82.72	37.52	81.76	82.72	37.56	81.70	82.66	37.60	81.64	82.60	37.64	81.56
14'	83.16	37.44	81.84	83.00	37.48	81.80	82.72	37.52	81.76	82.68	37.56	81.72	82.68	37.60	81.68	82.64	37.64	81.64	82.60	37.68	81.60
16'	83.11	37.48	81.78	82.95	37.52	81.74	82.64	37.56	81.68	82.60	37.60	81.64	82.60	37.64	81.60	82.56	37.68	81.56	82.56	37.72	81.52
18'	83.07	37.52	81.74	82.91	37.56	81.70	82.60	37.60	81.64	82.56	37.64	81.60	82.56	37.68	81.56	82.52	37.72	81.52	82.52	37.76	81.48
20'	83.02	37.56	81.69	82.86	37.60	81.65	82.51	37.64	81.61	82.47	37.68	81.57	82.47	37.72	81.53	82.43	37.76	81.49	82.43	37.80	81.44
22'	82.98	37.60	81.65	82.82	37.64	81.61	82.43	37.68	81.57	82.39	37.72	81.53	82.39	37.76	81.49	82.35	37.80	81.45	82.31	37.84	81.40
24'	82.93	37.64	81.60	82.77	37.68	81.56	82.38	37.72	81.52	82.34	37.76	81.48	82.34	37.80	81.44	82.30	37.84	81.40	82.26	37.88	81.36
26'	82.89	37.68	81.56	82.73	37.72	81.52	82.34	37.76	81.48	82.30	37.80	81.44	82.30	37.84	81.40	82.26	37.88	81.36	82.22	37.92	81.32
28'	82.84	37.72	81.52	82.68	37.76	81.48	82.29	37.80	81.44	82.25	37.84	81.40	82.25	37.88	81.36	82.21	37.92	81.32	82.17	37.96	81.28
30'	82.80	37.76	81.47	82.64	37.80	81.44	82.25	37.84	81.40	82.21	37.88	81.36	82.21	37.92	81.32	82.17	37.96	81.28	82.13	38.00	81.24
32'	82.76	37.80	81.42	82.60	37.84	81.38	82.21	37.88	81.34	82.17	37.92	81.30	82.17	37.96	81.26	82.13	38.00	81.22	82.09	38.04	81.18
34'	82.72	37.84	81.38	82.56	37.88	81.34	82.17	37.92	81.30	82.13	37.96	81.26	82.13	38.00	81.22	82.09	38.04	81.18	82.05	38.08	81.14
36'	82.67	37.88	81.33	82.51	37.92	81.29	82.13	37.96	81.26	82.09	38.00	81.22	82.09	38.04	81.18	82.05	38.08	81.14	82.01	38.12	81.10
38'	82.63	37.92	81.29	82.47	37.96	81.25	82.09	38.00	81.22	82.05	38.04	81.18	82.05	38.08	81.14	82.01	38.12	81.10	81.97	38.16	81.06
40'	82.58	37.96	81.24	82.42	38.00	81.20	82.05	38.04	81.18	82.01	38.08	81.14	82.01	38.12	81.10	81.97	38.16	81.06	81.93	38.20	81.02
42'	82.54	38.00	81.19	82.38	38.04	81.15	82.01	38.08	81.12	81.97	38.12	81.08	81.97	38.16	81.04	81.93	38.20	81.00	81.89	38.24	80.96
44'	82.49	38.04	81.15	82.33	38.08	81.11	81.93	38.12	81.08	81.89	38.16	81.04	81.89	38.20	81.00	81.85	38.24	80.96	81.83	38.28	80.92
46'	82.45	38.08	81.11	82.29	38.12	81.07	81.89	38.16	81.04	81.85	38.20	81.00	81.85	38.24	80.96	81.81	38.28	80.92	81.79	38.32	80.88
48'	82.41	38.12	81.07	82.25	38.16	81.03	81.85	38.20	81.00	81.81	38.24	80.96	81.79	38.28	80.92	81.75	38.32	80.88	81.73	38.36	80.84
50'	82.36	38.16	81.03	82.20	38.20	81.00	81.81	38.24	80.96	81.75	38.28	80.92	81.71	38.32	80.88	81.69	38.36	80.84	81.67	38.40	80.80
52'	82.32	38.20	80.99	82.16	38.24	80.95	81.77	38.28	80.92	81.67	38.32	80.88	81.63	38.36	80.84	81.59	38.40	80.80	81.57	38.44	80.76
54'	82.27	38.24	80.95	82.11	38.28	80.91	81.73	38.32	80.88	81.63	38.36	80.84	81.59	38.40	80.80	81.55	38.44	80.76	81.51	38.48	80.72
56'	82.23	38.28	80.91	82.07	38.32	80.87	81.69	38.36	80.84	81.57	38.40	80.80	81.53	38.44	80.76	81.49	38.48	80.72	81.47	38.52	80.68
58'	82.18	38.32	80.87	82.02	38.36	80.83	81.65	38.40	80.80	81.51	38.44	80.76	81.47	38.48	80.72	81.43	38.52	80.68	81.41	38.56	80.64
60'	82.14	38.36	80.83	81.98	38.40	80.79	81.49	38.44	80.75	81.41	38.48	80.71	81.37	38.52	80.68	81.39	38.56	80.64	81.37	38.60	80.60
c=75...	68	31	68	32	67	33	66	35	65	36	35	35	35	35	35	35	35	35	35	35	35
c=115...	1.05	48	1.04	50	1.03	51	1.02	53	1.01	55	1.00	57	1.00	57	1.00	57	1.00	57	1.00	57	1.00
c=190...	1.73	79	1.72	82	1.70	85	1.69	88	1.67	91	1.65	94	1.65	94	1.65	94	1.65	94	1.65	94	1.65

Published by the A. Lutz Co., San Francisco, Cal.

Mrs. S. E. Freeman

J. P. Freeman, Wind, Parlor

1/7/20 Winslow

W. H. Graham + Co Lodi Cal P.O. Bx 333

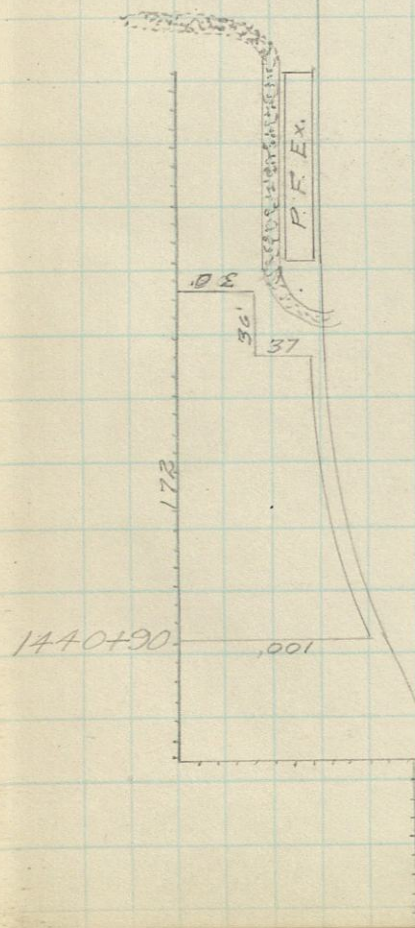
2600' of 16" Con Pipe on ground

900' of 12"

Occupied ground since Dec 23rd 1919

Walnut Grove

To Sacto



WALNUT GROVE

1120

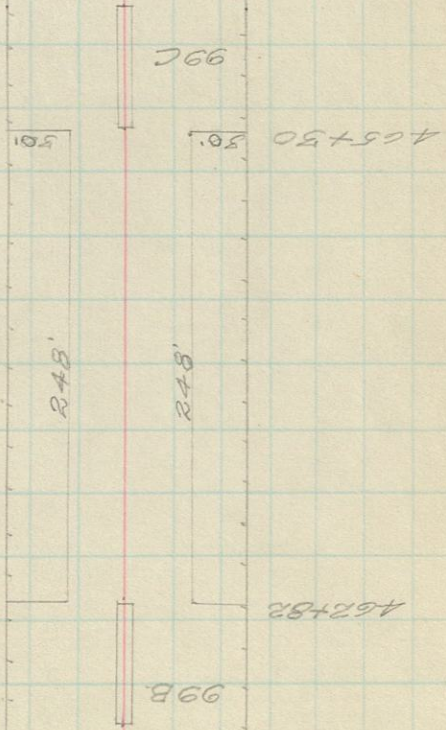
Undergraduate Paper Strip for J. B. Wise Walnut St.
P.O. Box 117

1120+23

un-Tasato

CONTENT

To Walnut Gr.



210'

3 Cars Asfalt Tank

2 Cars Oil Tank

305' H.B.

243' H.B.

137' B.B.

Chico

St.

Cedar

Chico Contra-
cting Co. Rock
Plant.

150

85

45

429

Williams

Herrman

1/26/20

Scales 18x20 Covered

Office 24x60'

5-7

5-6

New Eng. Mills

- 941+03 C.G. 137K Initial Pt.
941+84 led Pipe X-es M. line at Rt. Angles
941+84 Spring 45' out left.

RR+68

E. Cor Popple No 482 Out 5' to Tr.

RR+65

E. Face X-20 M Line

New Eng Mills

RR+65

RR+68

ex Pump House

3" Oil Pipe
2" Steam Pipe

To 5' marks

M2145v11e

Marysville
Station

1874. Cook H.O.

Sixth

St.

140'

50'

St.

2045+25

180°

Schad Bros. Williams

460'

27' 82'

3'

4'

5'

6'

4'

8'

9'

2050'

D

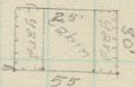
9/0

Eng. Mc Crary Truckee

AR32+38 East Face of lot 56' x 30'

Eleanor L. Thompson (3rd Trick
Operator Gunter) P.O. Address
Blue Canon

AR32+35 140



Yuba City

134+20

8" Con Pipe

Mrs N Jordan

Grimes

4 CG C 533+702

4 CG D 534+592

93

x 562

4 CG E 537+902

Iron Gate

CG 2 Iron Gate
CG 2 516+874

CG 2 103 42 X 5' Conc Bx

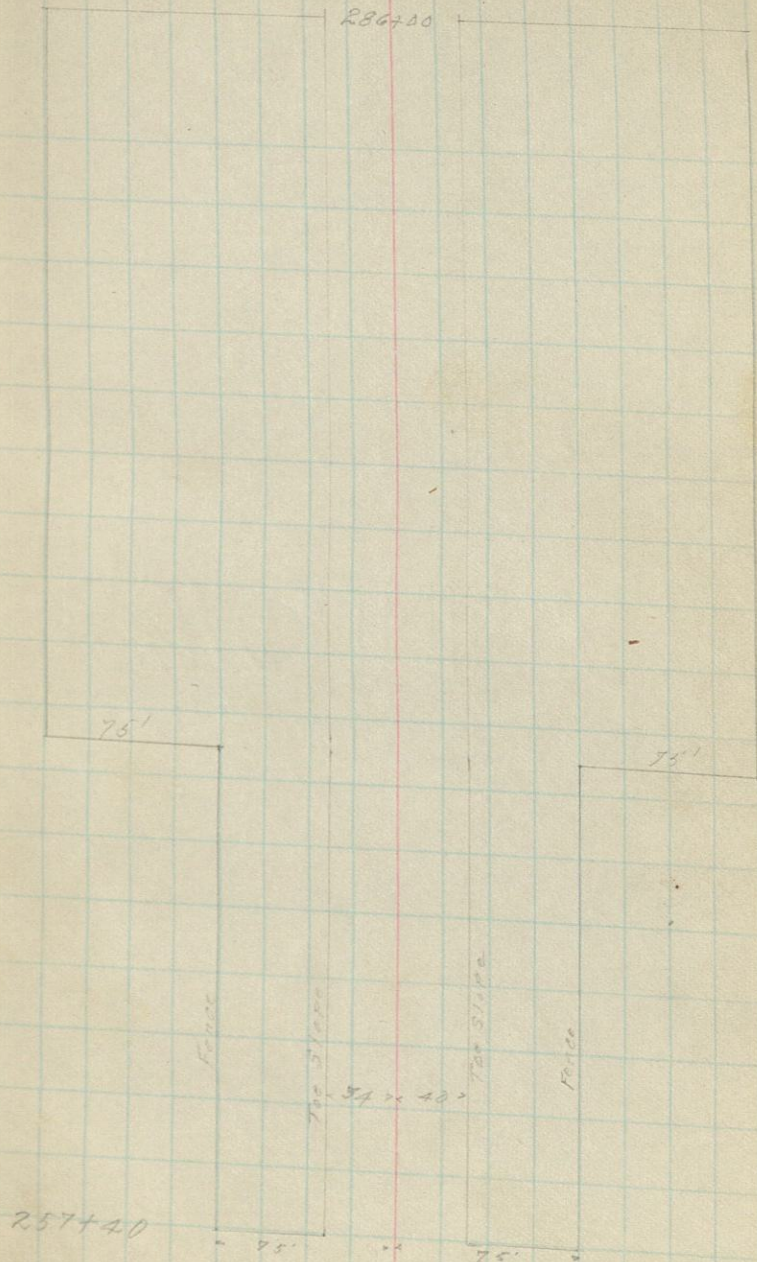
125
525
645

Bx45

C. A. Arvedson College City

GRAINO

40' from HB



Richvale

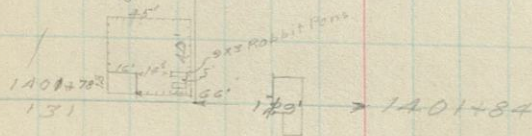
1401+97

East face See Foreman's Can

1401+84

131'

500'



2 bears app. 1000 ft. E. of ridge.

Cult Lease for Road

129
131
260

Sridley

Clark & Henry Const Co. Inc.
Clark & Henry Building
Stockton Calif.

W.R. Clark (Pres)
Geo. R. Henry (Sec)

St.

Hazle

12 ft

13 ft

905+25

Mr. Nasir

H.A. Minasian 4220 1/2 St.
Colusa

0+00
2449+072 2x3' Wood Box 131-D-Initial Pt.
9+27
2440+80 Farm Xing
9+745
2439+32± 2x2 Con Bx 131-E-
22+61
2426+46 East Road Stake
23+21
2425+86 West Road Stake
24+17
2424+90 ± Hamblen Rd Xing

West of Maxwell

15' Ditch

23+21

12' Road

22+61

10' OPEN

Highway

into Tehama

SVI

Fairbanks 3 H.P. Vertical Eng. Cylinder
 10" x 18"

4" Intake
 6" Out
 1 1/2" in Pump

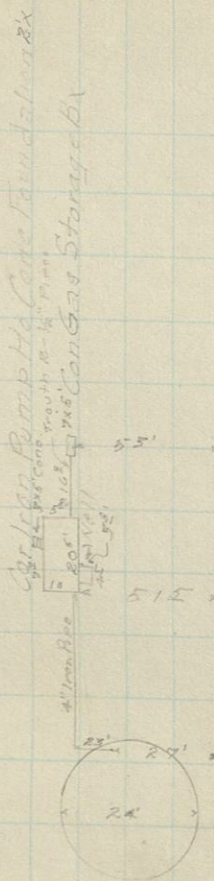
12000 Piers

1912

GRIMES

1588+00

1588+26



To Hamilton

PRINCE TOWN

2915+00

 9x9 Cor Iron Pump Ho
 3' 1" 5' 1" well

2916+03



w-To Hamilton

875 1st March

G.P. Williams lease Both sides Eng Sta 3206+40 to 5355+162

Glenn ~~Glenn~~

Pierce

Gate →
3368+60

To Ham

5368+92
Gate

12'
12'

5353+22

5355+16

25' by 8 Car Spot

74'

West of Wyo

Cory

400' West MP 3117

177 B #3 CG. to 178 C #5 CG

178 D #3 CG. to 179 A

0+00

177 C

0+46

178 D

5+02⁵

5' Bal DK 178 E

22+69

5' Bal BL 178 F

25+57

179 A #3 CG

L.H.

23-

DEED

John Boggs to The Northern
Railway Company. This
indenture Made the 14th day
of June the year of our
Lord (1875) between John
Boggs of the County of
Colusa and the State of
California. The party of the
first part and the Northern
Railway Company. A Cor-
poration duly incorporat-
ed under the laws of
the state of California party
of the second part. Wit-
nesseth that the said
party of the first part
for and in consideration
of the sum of One Dollar
to him in hand paid

by the said party of
the second part at or be-
fore the enrolling and de-
livery of these presents, the
recipt in where of is here-
by acknowledged has Granted
and Conveyed, and by these
presents does grant and
Convey unto ^{the} second party
of the second part and
to its successors and
assigns forever. All of
his interests, of, in and to
a certain strip or parcel
of land, lying being and
situated in the County of
Colusa, and the State of
California and described
as follows, to wit. A

Strip or Tract of Land,
one hundred feet wide
lying equally on each
side of the ^{center line} located line
at Northern Railway Com-
pany's railroad. Where the
same is located through
the north $\frac{1}{2}$ of Sec. 34, Secs.
Nos. 22, 15, North half of 16
South half of 9 and south
half of 10 all in Town-
ship No. 15, North range of
R. 3 west of Mount Diablo
Base and Meridian, being
more particularly described
as follows, to wit. Commen-
cing for the same at a
point on the center line
of the said railroad,

where said center line
intersects the south line
of said North $\frac{1}{2}$ of Sec.
No. 34 at Eng Sta 2849+10
and running thence northerly
along said center line
of said railroad and
embracing a strip of land
fifty feet wide of each
side of said center line.
Continuously through said
N. $\frac{1}{2}$ of Sec 34, Secs, 22, and 15
The N. $\frac{1}{2}$ of 16 The S. $\frac{1}{2}$ of 9
and S. $\frac{1}{2}$ of 10 To Station
No 3116⁹2+30 on the North line
of said S. $\frac{1}{2}$ Sec 10 a dist-
ance of 16020 feet and
containing an area of
(36.84) acres of land

more or less.

To have and to hold, all and singular, the above mentioned and described premises together with the appurtenances, unto the said ^{party} of the second part, and to its successors assigns forever.

The aforesaid conveyance is made upon the express condition that the party of the second part will build and maintain good and substantial fences on each side of said strip of land and construct four cattle guard crossings on said land.

In witness whereof the said ~~and~~ party of the first part has thereunto set hand and seal the day and year first above written. Signed sealed and delivered in presence of H. B. Underhill } John Boggs

State of Calif. city and County of S.F. On this 21st day of June 1875 before me Charles J. Forbart, a notary of Public in and for this said city and county of S.F. ~~cal.~~ personally appeared H. B. Underhill, personally known to me to be the same person whose name is subscribed to annexed instrument as a witness at there to who being by me duly sworn deposed and said that

he reside in the city and county of
S. F. state of Cal., that he was present and
saw John Boggs, personally known to him
to be the same person described in and
who executed the said instrument as
a party thereto, signed sealed and deliver
the same and that the said John Bogg
acknowledged in the presence of said
affiant that he executed the same
freely and voluntarily and for the uses
and purpose therein mention and that he
the said affiant subscribe his name to said
instrument as a witness thereof.

In witness whereof I hereunto
set my hand and affixed my official seal
at my office in the city & county of S.F.
Cal. the day and year in this certificate
first above written (Charles J. Torbert
Notary Public) I in and for the city and
county of S.F. California.

Recd of and filed for record and request
of P. L. Washburn July 12, AD. 1895
at 8 min. past 12. P.M. S. W. Bishop.
Recorded By J. H. Pope Deputy
Recorded in book 116 of deeds pages 145
& 116 Colusa County Records July 13, 1895
S. W. Bishop
Recorder
By J. H. Pope Deputy

7TH

S.T.

ENIGMA

5/9/20 Hermann.

1554+35

310' 4+4+176 JH

148

58

4

6

5

4

5

Side Track

1552

into Gerber

7+95

Herman

LOS. MOLONIS 5/9/20

1455+62 4 Farm Xing

1471+80 4 Cattle Guard 209 A

1480+67 Initial Pt West Face Station

Cult. lease applied for by A.E. Burns
from Eng Sta 1455+62 to 1471+80

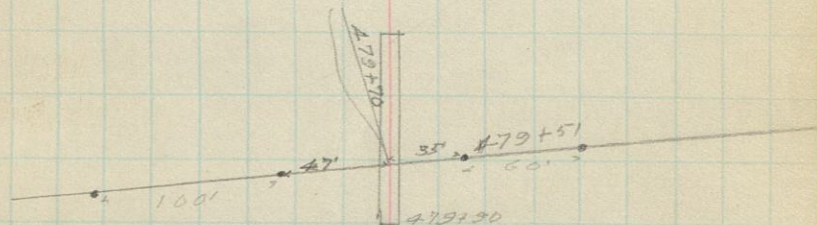
3/10 Chico

3/11 Sacto

3/11 Orland

Hamilton 3/12

Shattuck-Edinger Co. Inc
E. S. Shattuck (Pres)
W. J. Nimmo (Sec)
General Office 414 Marsh-Strong Bldg.
Los Angeles



of M 21

3/15 Walnut Grove

3/16 Sacto

400 Gal Gas Tank. 12X8 2

26' From N. Face Fruit Ho

12' 8" 2'

3/18/20

New Castle

630+49 118B Rxx Stone Bx Initial Pt

633+14 Pipe at ditch 127' Out Left

625+60 Pipe 200' Out Left

3 1/2 MI. Pipe

John Saladama

New Castle

Auburn

This indenture made the
20th day of Feb. in
the year of our Lord
(1913) between Clinton C.
Rowell of Colfax County
of placer state of Calif.
the party of the first
part, and B. P. Co a Cor-
poration existing under
the laws of the state of
Kentucky the party of the
second part witnesseth
That the said party of
the first part, for and
in consideration of the
sum of (Ten) dollars,
gold coin of the U.S.A.,
to him in hand paid
by the said party
of the second part,
the receipt whereof is
here by acknowledged, does
by these presents grant,
bargain, sell, convey and
confirm unto the said
party of the second part,
unto its successors and
assigns for ever ~~all~~ that
certain lot, piece or parcel
of land, situate, lying
and being in the County
of placer, state of Calif.,
bounded and described
as follows, to wit: All
that certain strip and
track of land, situate,
in placer Co, state of
Calif., and described as

follows all that certain
tract of land, being in
the south half of lot 4
(S $\frac{1}{2}$ of lot 4) of ~~the~~ S.W. $\frac{1}{4}$
~~SW~~ of Sec. 19 Township
15 N, Range 10 East
Mount Daabla Meridian
lying southerly of a
line drawn at a uniform
distance of 200 feet south-
erly from the center
line of the present oper-
ated main track of the
C.P. Ry, and northwester-
ly of a line drawn at
a uniform distance of
200 feet southeasterly
from the center line (V)
of the new double

Track of the C.P. Ry,
as the same is now
marked and staked out
over and across said
S. $\frac{1}{2}$ of lot 4 of said
south west $\frac{1}{4}$ said
tract of land contains
89 acres more or less.

M.D. Lininger, Pres. Board.

147 C 3'x3' Con Box

West of Applegate West B Track

0+00 133 F CG
0+6 133 E Pipe
0+60 133 F CG

From 200 East of CG. 133 F to
300 West of 133 A
680 East of E Portal EB line

727+53 CG. 133 F Initial Pt.

729+53 East Boundary line of lease

707+58 West

L.W. Weak of Applegate applied
For the R.W. East side of the West
bound Track from Eng Sta 729+53
to 707+58

0+00

R663+67

0+33

R664+00

1+22

R664+84

52+11

R715+78

Rd Xing

Tel Line Rt

Tel Xing

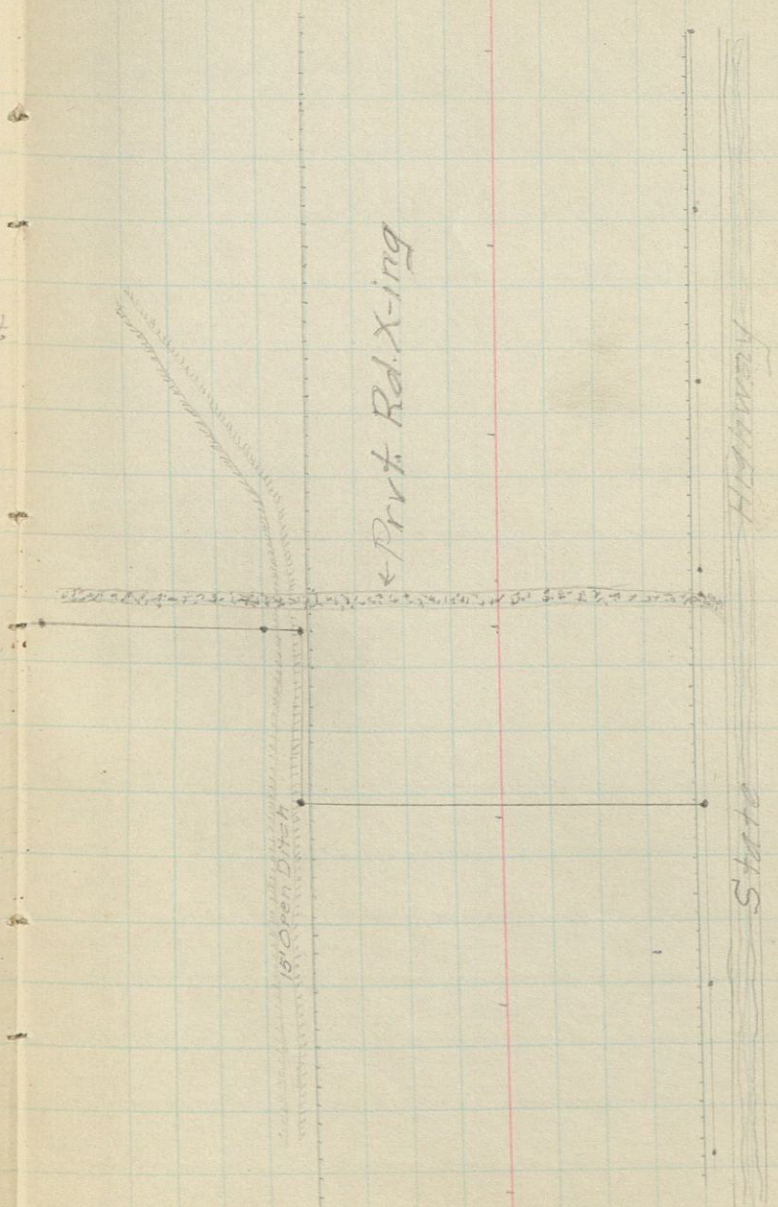
West B. Wall of 137A Initial Pt.

Undergrade Tel X-ing for
Maxwell Irrigated Farms Co. Inc.

F. J. Woodward (Pres.)

E. M. Ward (Sec)

602 Federal Realty Building
Oakland, Calif.



East of Rocklin on East B. Track

61' West CG 113E 4" Iron Water Pipe

Jose Villodres

Loomis Calif.

F. H. Horey Placerville

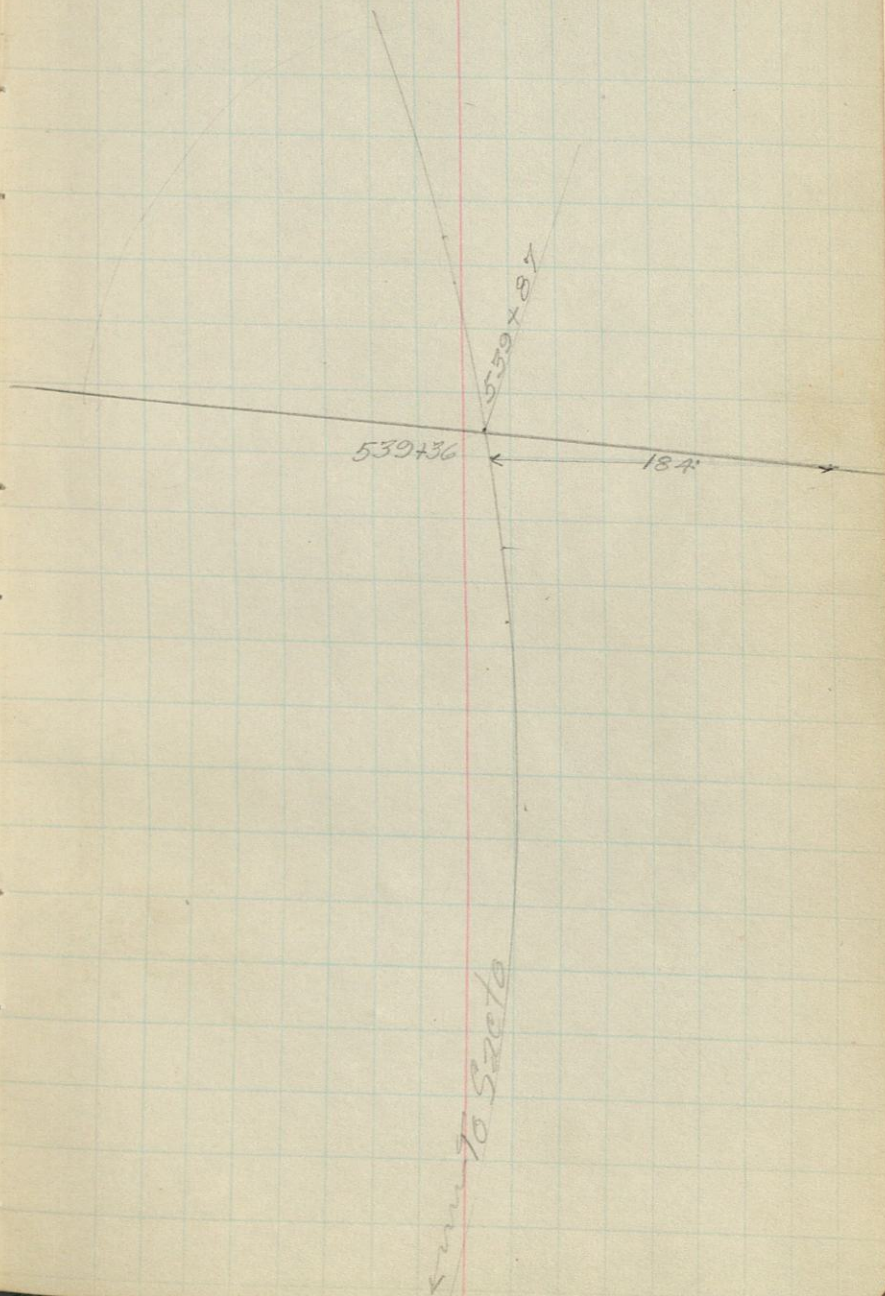
Penryn

R.E. Schwalenberg Penryn

3" W.I. Water Pipe.

539+87 Pipe crosses M line

539+36 Ditch 184 cut



Spolding Ranch Rd. X-ings

2949+61 Rd X-ing.

2975+22 415' Farm X-ing

2936+53 12'

3017+95 412' Farm X-ing Aband

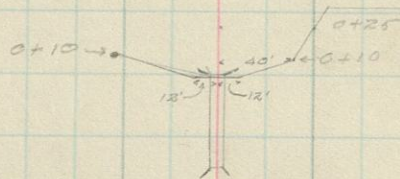
3064+80 415'

2981+42 Norman Rd X-ing

3168447
0+00

West Face 1450 Bal. Dk.

Riz



Underground Tel. Xing for

← To Tehran.

To Sadoon

RENO

Clarks Hendry Paving Plant
Tank 2 car Asphalt
Oil 1 car Oil
60 H.P. Boiler
250'
125' Track

Ward Bros.

Albert W. Edwards Attached
1613, 245.15 A¹ Nov 1919

2565+13 East End lease
2565+63 West End lease
2565+74 242A Initial Pt

1400
400

Lena Arneson bought Paige
Place at Verdi \$1400 Cash

Joseph E. Martin 235 Palstan St. Reno
Wood Yard

Leoth Bonoj, W.B. Jackman

0+00 West H.B. House Track Initial R.

R+50 West End of lease

3+50 East 25' Deep

12-3/4" Taps Hot + Cold Water

1-2" Tap

1/2" Taps

123'

0+00

112

2+63

3+38

112 H 2x2 Stone Bx. Initial Pt.

Fence Cor. 101' Out RT

Fence Inter Sects. M. line

B. Mehl. Looknig

2+63

Original Fence Cor 101' Out

2+05

1-sects M. line

60' Road

877'

700'

W. E. Tuttle Rocklin

215+99

0498

1758

West face of lease

Derrail.

4+77⁵ - 106+00 B50

B.E. Perkins Collegocity

0+00

W.F. 1000 Brestle

7+00⁵

WEST FACE LEASE

127+86

East CG.111A

J. M. Peart. College City

115+40 West End lease both
sides track 15' out from
center of track

115+40 4 2' Con Pipe 111-C-

132+75 RF 111-D-#3 C.G. East Face.
Lease

C.G. About 1000' West of
College City West. H. B.

Doak Colusa Calif

133+24 W.F. 111 E. CG. Nest face

Lease both sides track

20' Center.

154+60

East End of wease

G.W. Eid College City

1573+02

West Face Union Ice Ho

1573+81

Shell Oil Co West Face

GRIMES

1974+01

2 x 2 Shell Co Box
2" x 1" PNC

6' x 18' x 18' Wood Box

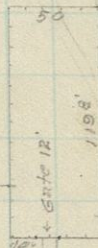
1573+03

100' 23' 17' of
Box

Stairs

18" Eaves

Driveway incline



1573+81

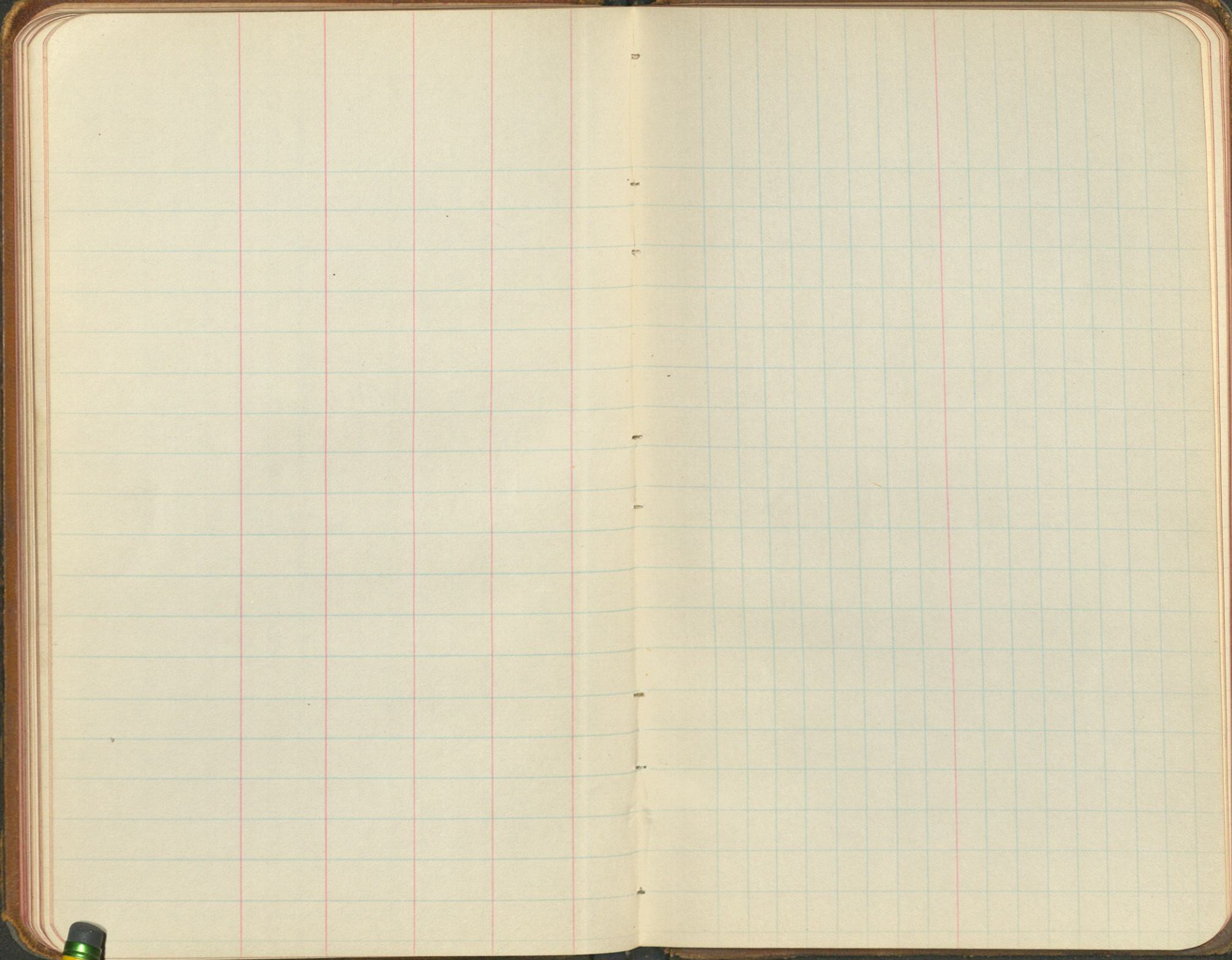


TABLE ONE

GALOLINE OR DISTILLATE

Distance from Main Line

500 gals
 1000 "
 8000 "
 12000 "
 18000 "
 24000 "
 30000 "
 48000 "
 75000 "
 100000 "
 150000 "
 250000 "
 500000 "
 1000000 "
 Unlimited "

50 ft.
 50
 50
 50
 50
 70
 80
 100
 120
 140
 150
 175
 275
 325
 375
 400

TABLE TWO

FUEL OIL

Distance from Main Line

40 ft.
 40
 40
 45
 50
 55
 70
 80
 100
 120
 150
 200
 275
 325
 400

Table one includes all liquids having a flash point under 74° Far. including ether, alcohol, gasoline, distillate, etc., and Table No. 2 includes those having a flash point from 74° to 187° including turpentine, kerosene and fuel oil.

Table showing the difference of latitude and departure in running 80 chains at any course from 1 to 60 minutes.

MINUTES	LKS.	MINUTES	LKS.	MINUTES	LKS.
1	2 1/3	21	49	41	95 2/3
2	4 2/3	22	51 1/3	42	98
3	7	23	53 2/3	43	100 1/3
4	9 1/3	24	56	44	102 2/3
5	11 2/3	25	58 1/3	45	105
6	14	26	60 2/3	46	107 1/3
7	16 1/3	27	63	47	109 2/3
8	18 2/3	28	65 1/3	48	112
9	21	29	67 2/3	49	114 1/3
10	23 1/3	30	70	50	116 2/3
11	25 2/3	31	72 1/3	51	119
12	28	32	74 2/3	52	121 1/3
13	30 1/3	33	77	53	123 2/3
14	32 2/3	34	79 1/3	54	126
15	35	35	81 2/3	55	128 1/3
16	37 1/3	36	84	56	130 2/3
17	39 2/3	37	86 1/3	57	133
18	42	38	88 2/3	58	135 1/3
19	44 1/3	39	91	59	137 2/3
20	46 2/3	40	93 1/3	60	140

TABLE FOR RUNNING ON SLOPES:

In the following table the first column shows the angle, the second the number of links to be added to a chain on the slopes, to make one chain, horizontal measurement.

Angle	COR. IN LINKS	Angle	COR. IN LINKS	Angle	COR. IN LINKS	Angle	COR. IN LINKS
0		0		0		0	
4	0.24	11	1.88	18	5.14	25	10.54
5	0.38	12	2.24	19	5.76	26	11.26
6	0.55	13	2.63	20	6.42	27	12.24
7	0.76	14	3.06	21	7.11	28	13.37
8	0.98	15	3.53	22	7.85	29	14.34
9	1.24	16	4.02	23	8.64	30	15.47
10	1.55	17	4.56	24	9.47	35	22.07

THE A. LIETZ COMPANY
SAN FRANCISCO